

SOME DATA ON THE FAUNA: BLATTODEA,
MANTODEA, PHASMODEA AND ORTHOPTERA
OF NORTH AFGHANISTAN.

BY

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(With 6 text-figures).

The present paper is the result of a study of the collections made in North Afghanistan by N. N. Umnov in 1930 and by V. A. Maximov in the years 1930-31.

The records of *Blattodea*, *Mantodea* and *Orthoptera* of Afghanistan, up to the present time published by several authors, have been included into the paper in order to elucidate the fauna of the country which is still very little studied.

The present list comprises: 6 *Blattodea*; 10 *Mantodea*; 1 *Phasmodea* and 57 *Orthoptera*, the last order containing: 3 *Tettigonioidea* 6 *Gryllodea* and 48 *Acridodea*. As compared with what was known from literature, our knowledge is now more complete. Several species are recorded for the first time, namely: 2 *Blattodea*, 4 *Mantodea*, 1 *Phasmodea* and 36 *Orthoptera* (3 *Tettigonioidea*, 4 *Gryllodea*, 29 *Acridodea*. Among the members of the last suborder five species new to science have been found.

The holotypes and allotypes of these new species are preserved at the Zoological Institute of the Academy of Sciences, Leningrad.

The author feels it his pleasant duty to express his sincere thanks to Dr. B. P. Uvarov, who kindly sent me for study valuable material and for his kind assistance in the preparation of my paper; to Dr. E. F. Miram, curator of *Orthoptera* in the Zoological Institute of the Academy of Sciences in Leningrad, for her permission to examine the small but very interesting collection of N. N. Umnov; to Dr. S. A. Predtetschensky, senior entomologist of the Institute for Plant Protection in Leningrad for his valuable directions and for the communication of his unpublished records; to Mr. V. A. Maximov, who has kindly placed at the author's disposal his collection.

BLATTODEA

*1. *Polyphaga saussurei* (Dohrn), 1888.¹

Gurimar, 19-8-1930, 1 ♂, 2 ♀♀, 4 larvae (Maximov).

2. *Polyphaga camolorum* Kirby, 1903.

Kirby (1889) has recorded this species from Hari-Rud valley under the name *Polyphaga sp.* and Chopard (1929) has recorded it from Badghis.

¹ Species marked with a small asterisk are recorded from Afghanistan for the first time.

3. Polyphaga obscura Chopard, 1929.

This species has been described by Chopard (1929) from Paghman near Kabul.

4. Anisogamia tamerlana Saussure, 1893.

Recorded from Afghanistan by Brancsik (1897).

5. Heterogamodes roseni (Brancsik), 1897.

This species has been described by Brancsik (1897) from Afghanistan, without exact indication of locality, under the name *Heterogamia roseni* Branc.

***6. Phylodromica irinae** (Bey-Bienko), 1932.

Ak-Tepe, 27-7-1931. 1 ♀ (Maximov).

MANTODEA

7. Eremiaphila arabica Saussure, 1871.

Kirby (1894) has recorded this species from between Khusan and Quetta.

***8. Armene pusilla** (Eversmann), 1854.

Gurimar, 19-8-1930, 1 ♀ (Maximov).

9. Hierodula transcaucasica Brunner von Wattenwyl, 1878.

Gurimar, 19-8-1930, 1 ♀ (Maximov).

Recorded by Kirby (1889) from Afghanistan under the name *Hierodula robusta* Saussure?

10. Mantis religiosa (Linnaeus), 1758.

Kirby (189) has recorded this species from Afghanistan, without exact indication of locality.

***11. Oxythespis wagneri** (Kittary), 1849.

Kazan, 14-8-1930, 1 ♂, 2 ♀♀ (Maximov).

***12. Iris oratoria polystictica** (Fischer de Waldheim), 1846.

Ak-Tepe, 17-7-1931, 3 ♂♂, 1 ♀ (Maximov).

13. Iris splendida Uvarov, 1922

This species has been described by Uvarov (1922) from Afghanistan, without exact indication of locality.

14. Rivetina baetica (Rambur), 1839.

Gurimar, 19-8-1930, 1 ♂, 2 ♀♀; Ak-Tepe, 27-7-1931, 5 ♂♂ (Maximov).

Kirby (189) has recorded this species from Hari-Rud valley under the name *Polyspilota striata* Stoll, while Jacobson and Bianchi (1902-1905) put it under the name *Polyspilota aeruginosa* Goeze.

***15. Empusa pennicornis** (Pallas), 1773.

Man-guzar, 16-8-1930, 3 ♀♀; Ak-Tepe, 27-7-1931, 1 ♂ (Maximov).

16. Blepharopsis mendica nuda Giglio-Tos, 1917.

Kirby (1889) has recorded this species from Afghanistan, without exact indication of locality, under the name *Blepharis mendica* Fabricius.

PHASMODEA

17. Gratidia adelungi Brunner von Wattenwyl, 1908.

Kazan, 11-8-1930, 1 ♀ (Maximov).

♀ (nova). Body large, nearly smooth.

Head elongated, with indistinct longitudinal keels, with two very distinct acute projections between eyes; median keel distinct, reaching to the occiput. Occiput with two tubercles. Eyes round. Antennae moderately thick, 17 jointed, a little longer than head and pronotum together.

Pronotum anteriorly feebly constricted, short, its length nearly 1.5 times as long as maximum width; its surface with distinct longitudinal folds, behind the middle with distinct transverse depression. Mesonotum long, anteriorly somewhat narrowed. Metanotum considerably shorter than mesonotum, parallel-sided. Mesonotum and metanotum with distinct median keel, their surface finely and very densely punctured, with sparse granulae.

Sternum finely and densely punctured, with indistinct granulae. Abdomen with distinct median keel, finely and densely punctured and with indistinct

granulae, on each side with indistinct lateral keels. Apex of the subgenital plate shortly-triangular.

General coloration brownish-white.

	♀
Length of the body ...	89.5 mm.
„ of the antennæ ...	9.5 „
„ of the pronotum ...	2.9 „
„ of the mesonotum ...	17.5 „
„ of the metanotum ...	14.3 „
„ of the anterior femora ...	17.5 „
„ of the middle femora ...	17.5 „
„ of the hind femora ...	24.0 „

ORTHOPTERA

Tettigoniodea

- *18. *Conocephalus buxtoni* Chopard, 1921.
Mouth of the river Kunduz-Daria, 29-7-1931, 2 ♂♂, 1 ♀ (Maximov).
- *19. *Metrioptera tamerlana* (Saussure), 1874.
Mouth of the river Kunduz-Daria, 29-7-1931, 9 ♂♂, 7 ♀♀ (Maximov).
- *20. *Decticus albifrons* (Fabricius), 1775.
Ak-Tepe, 27, vii., ♂♂, 5 ♀♀; Mouth of the river Kunduz-Daria, 29-7-1931, 1 ♀ (Maximov).

Gryllodea

21. *Gryllotalpa africana* (P. Beauvois), 1805.
Kirby (1889) has recorded this species from Hari-Rud valley under the name *Acheta africana* F. Beauv.
22. *Gryllus bimaculatus* (De Geer), 1773.
Ak-Tepe 27-7-1931, 2 ♀♀ (Maximov).
Kirby (1889) has recorded probably this species from between Khusan and Quetta under the name *Gryllus capensis* Fabr.
- *23. *Gryllulus tartarus* (Saussure), 1874.
Mouth of the river Kunduz-Daria, 29-7-1931, 11 ♂♂ 13 ♀♀ (Maximov).
- *24. *Gryllulus chinensis* (Weber), 1801.
Ak-Tepe, 27-7-1931, 3 ♂♂, 1 ♀ (Maximov).
- *25. *Gryllulus bucharicus* (Bey-Bienko), 1933.
Mouth of the river Kunduz-Daria, 29-7-1931, 2 ♂♂, (Maximov).
- *26. *Pteronemobius heydenii concolor* (Walker), 1871.
Mouth of the river Kunduz-Daria, 29-7-1931, 1 ♂, 4 ♀♀ (Maximov).

Acridodea

27. *Acrida deserti* Uvarov, 1916.
Man-Guzar, 16-8-1930, 7 ♂♂, 4 ♀♀; Ak-Tepe, 27-7-1931, 5 ♂♂, 1 ♀ (Maximov).
Tarbinsky (1926) has recorded this insect for Mazar-i-Sherif under the name *Acrida turrita deserti* Uvarov, but Miram (1935) regards it as a good species.
28. *Acridella nasuta* (Linnaeus), 1758.
Man-Guzar, 16-8-1930, 2 ♂♂, 1 ♀ (Maximov).
Probably this species has been recorded by Kirby (1889), under the name *Acrida grandis* Klug? from between Khusan and Quetta.

***29. Gonista sagitta** (Uvarov), 1912.

Mouth of the river Kunduz-Daria, 29-7-1931, 1 ♀ (Maximov).

***30. Platypterna mistshenkoi** Bey-Bienko, 1936.

Kazan, 11-8-1930, 2 ♂♂, 1 ♀ (Maximov).

***31. Duroniella kalmyka** (Adelung), 1906.

Mouth of the river Kunduz-Daria, 29-7-1931, 9 ♂♂, 7 ♀♀ (Maximov).

32. Doclostaurus maroccanus (Thunberg), 1815.

Kara-bel, 28-6-1930, 1 ♂, 3 ♀♀; Ak-Tepe, 27-7-1931, 7 ♂♂, 3 ♀♀ (Maximov). Kirby (1889) has recorded this species from Badghis, under the name *Stauronotus maroccanus* Thunb.

***33. Doclostaurus tartarus** (Stshelkanovtzev), 1909.

Gurimmar, 19-8-1930, 1 ♂, 1 ♀; Ak-Tepe, 27-7-1931, 1 ♂, 6 ♀♀ (Maximov).

***34. Notostaurus albicornis albicornis** (Eversmann), 1847.

Kara-bel, 28-6-1930, 2 ♂♂ (Umnov); Gurimmar, 19-8-1930, 1 ♂ (Maximov).

All species belong to the typical race but are characterized by smaller dimensions of the body:

		♂♂
Length of the body	...	10.5—12.8 mm.
„ of the pronotum	...	2.2— 2.7 „
„ of the elytra	...	5.9— 7.1 „
„ of the hind femora	...	7.1— 8.3 „
„ of the hind tibiae	...	5.9— 7.1 „

***35. Mizonocara uvarovi** Bey Bienko, 1933.

Ak-Tepe, 27-7-1931, 1 ♂ (Maximov).

***36. Aiolopus affinis** (T. Bolivar), 1902.

Mouth of the river Kunduz-Daria, 29-7-1931, 4 ♂♂, 2 ♀♀ (Maximov).

37. Aiolopus thalassinus (Fabricius), 1781.

Mouth of the river Kunduz-Daria, 29-7-1931, 17 ♂♂, 7 ♀♀ (Maximov). Redtenbacher (1900) has recorded this species from Afghanistan, without exact indication of locality, under the name *Ephacromia tergestina* Charp.

***38. Aiolopus oxianus** Uvarov, 1926.

Mouth of the river Kunduz-Daria, 29-7-1931, 5 ♂♂, 1 ♀ (Maximov).

39. Locusta migratoria migratoria (Linnaeus), 1758, **ph. solitaria.**

Mouth of the river Kunduz-Daria, 29-7-1931, 6 ♂♂, 7 ♀♀, 3lv, 3liv (Maximov).

Kirby (1889) has recorded this species from Afghanistan (from between Khusan and Quetta) under the name *Locusta danica* Linn.

***40. Edaleus senegalensis** (Krauss), 1877.

Man-Guzar, 16-8-1930, 3 ♂♂, 4 ♀♀ (Maximov).

***41. Mioscirtus wagneri** (Eversmann), 1859.

1859. *Edipoda wagneri* Eversmann, *Bull. Soc. Imp. Nat. Mosc.*, vol. xxxii. No. 1, pp. 145-6, pl. I, fig. 3 [Type ♀; steppe between Volga and Ural]

1884. *S[cintharista] wagneri* Saussure, *Mem. Soc. Phys. Hist. Nat. Gen.*, vol. xxxviii. No. 9, pp. 121-2, no. 3.

188. *C[onozoa] rogenhoferi* Saussure, *Mem. Soc. Phys. Hist. Nat. Gen.*, vol. xxx. No. 1, pp. 60-61, no. 5, fig. 4 [type ♀; Baghdad].

1896. *Mioscirtus varentzowi*, Zubowsky, *Hor. Soc. Ent. Ross.*, vol. xxx. pp. 186-7, no. 12, [type ♀; Kopet-Dagh. Firjuza].

1922. *Mioscirtus wagneri rogenhoferi* Uvarov, *Journ. Bom. Nat. His. Soc.* vol. xxxiii. No. 3, p. 361, no. 29.

Man-Guzar, 16-8-1930, 14, ♂♂, 15 ♀♀ (Maximov).

The above synonymy has been established by S. A. Predtetshensky in his as yet unpublished work on *Acridodea* of Badghis.

The comparative dimensions of the Afghan and the Lower Volga specimens are given in the following table:

	Afghan specimens		L. Volga specimens (after Predtetshensky)	
	♂♂	♀♀	♂♂	♀♀
Length of the body	14.5-15.0 mm	22.5-28.5 mm	12.0-16.0 mm	17.0-25.0 mm
" of the pronotum	3.1- 3.2 "	4.4- 5.9 "	2.6- 3.2 "	3.7- 5.0 "
" of the elytra	13.5-17.0 "	21.0-28.0 "	11.4-15.1 "	16.8-22.0 "
" of the hind femora	8.8- 9.6 "	11.8-15.4 "	7.8- 9.0 "	10.5-12.8 "
" of the hind tibiae.	8.0- 8.8 "	11.0-14.6 "

*42. *Acrotylus insubricus* (Scopoli), 1786.

Mouth of the river Kunduz-Daria, 29-7-1931, 3 ♂♂ (Maximov).

*43. *Sphingonotus savignyi* Saussure, 1884.

Kazan, 11-8-1930, 2 ♀♀ (Maximov).

44. *Sphingonotus afghanicus* Mistshenko, 1936.

This species has been described by Mistshenko (1936) from Barazendan.

*45. *Sphingonotus nebulosus discolor* Uvarov, 1933.

Ak-Tepe, 27-7-1931, 2 ♂♂, 1 ♀ (Maximov).

46. *Sphingonotus longipennis* Saussure, 1884.

Recorded from Afghanistan (Parachinor, Kuran) by Uvarov (1925).

*47. *Sphingonotus obscuratus brunneri* Saussure, 1884.

Ak-Tepe, 27-7-1931, 1 ♂, 1 ♀ (Maximov).

48. *Sphingonotus octofasciatus* (Serville), 1839.

Recorded from Afghanistan by Kirby (1889) under the name *Sphingonotus kittaryi* Saussure?, without exact indication of locality.

*49. *Helioscirtus moseri moseri* Saussure, 1884.

Ak-Tepe, 27-7-1931, 3 ♂♂, 1 ♀ (Maximov).

*50. *Leptopternis gracilis* (Eversmann), 1847.

Kazan, 11-8-1930, 5 ♂♂, 2 ♀♀ (Maximov).

51. *Hyalorrhhipis turcmena* Uvarov, 1926.

Kazan, 11-8-1930, 2 ♀♀ (Maximov).

Jacobson and Bianchi (1902-5) recorded from Afghanistan also *Hyalorrhhipis clausi* Kittary, Dr. Aitchison being referred to as collector, but there is no such record in Kirby's report (1889) on his collection and Dr. B. P. Uvarov informs me that there are no specimens in Aitchison's material in the British Museum.

52. *Iranella eremiophila* Uvarov, 1922.

Recorded by Uvarov (1933) from Afghanistan, without exact indication of locality.

53. *Strumiger desertorum persa* Uvarov, 1933.

Kazan, 11-8-1930, 1 ♀ (Maximov).

A species recorded by Kirby (1889) with a mark of interrogation from Hari-Rud valley, under the name *Thrinchus campanulatus* F.-W. is a species of *Thrinchus* in poor condition and cannot be determined according to Dr. B. P. Uvarov who has examined it.

54. *Eremocharis afghana* Ramme, 1928.

This species has been described by Ramme (1928) from Kabul.

55. *Tropidauchen* sp. n.

Recorded by Kirby (1889) from Badghis and the Harī-Rud valley under the name *Eunapius granosus* Stål, and Uvarov (1922) put it under the name *Tropidauchen cultricolle* Saussure, while actually it represents an undescribed species as I am able to tell after the examination of the specimens kindly sent to me by Dr. B. P. Uvarov.

***56. *Tropidauchen uvarovi* sp. n. (Figs. 1 U and 2 U).**

♀ (holotype). Body strongly rugulose.

Head very rough with sharp granulae, in the posterior part rugulose. Eyes shortly-oval, feebly prominent sideways; vertical diameter of the eye a little larger than its horizontal diameter and nearly half the length of the interocular space. Face vertical. Frontal ridge very narrow, strongly depressed, under the median ocellum constricted, at the clypeus triangularly expanded and somewhat obliterated; seen in profile wavy, strongly prominent at the antennal bases; its margins thick. Vertex broad, octagonal, strongly depressed, granular, with two very sharp small tubercles at the middle; median keel in the posterior part sharp; its margins sharp and straight. Antennae thick, 15-jointed, far from reaching the posterior margin of the pronotum.

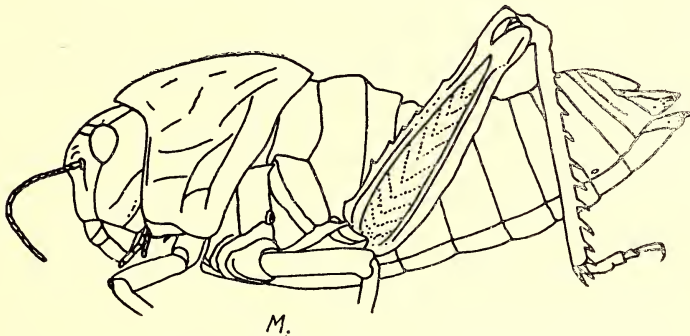
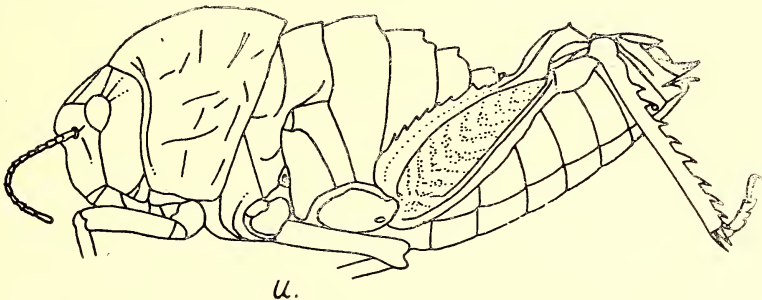


Fig.—1 U. *Tropidauchen uvarovi*, sp. n., type, ♀, xl. 8.

M. *T. miramae*, sp. n., type, ♀, ×18.

Pronotum strongly rugulose with very sharp granulae at the middle; on each side of the median keel with two oblique and very sharp granular holes; seen in profile feebly arched, at the posterior margin slightly excised; posterior angle obtuse, at the middle excised. Lateral lobes of the pronotum strongly rugulose and granular, with three indistinct transverse sulci; anterior margin a little wavy, anterior lower angle obtuse, feebly rounded; posterior margin strongly sinuous, oblique; posterior lower angle obtuse, feebly rounded; lower margin obliquely ascending, wavy.

Mesonotum and metanotum strongly rugulose and granular, with a median keel.

Sternum sparsely and finely punctured; its length almost 1.5 times as long as maximum width; interspace between lobes of the mesosternum about 1.5 times as wide as long. Processus of the prosternum wedge-shaped, excised in front.

Hind femur sharply-granular, its length 2.9 times as long as maximum width; upper margin with 8 sharp teeth and 1-2 small teeth between them; lower margin smooth, strongly wavy. Hind tibia a little shorter than the hind femur, with 9 spines on the outer and 8 spines on the inner side.

Abdomen with a sharp median keel, seen in profile forming rectangular teeth on the first segments of the abdomen and with triangularly-blunted teeth on the posterior margin of each other segment. Valvae of the ovipositor with blunted points; lower valvae with one large and several small teeth on the outer margin. Posterior margin of the subgenital plate rounded, prominent.

General coloration grayish-whitish. Apical part of the antennae brownish. Tibiae of the front and middle legs orange-reddish. Hind femora yellow inside; hind femur, with 9 spines on the outer and 8 spines on the inner side. Hind tibiae red inside, yellow-orange outside; spines yellow with black apex; tarsi red inside, orange outside.

♂ (allotype.) Like the female, but considerably smaller. Vertical diameter of the eye equals to two-thirds the interocular space. Interspace between lobes of the mesosternum 1.25 times as wide as long. Hind tibiae with 9 spines on both sides.

Coloration like the female.

	holotype ♀	allotype ♂	paratypes ♀♀	paratypes ♂♂
Length of the body ...	52.5 mm	35.6 mm	53.5-67.5 mm	29.8-36.5 mm
„ of the pronotum ...	14.4 „	9.7 „	13.5-15.8 „	8.2-9.2 „
„ of the hind femora .	20.0 „	15.0 „	20.0-22.5 „	13.0-14.8 „
„ of the hind tibiae ...	19.0 „	14.0 „	19.0-21.5 „	12.0-13.8 „

Patria. North Afghanistan: settl. Norbeck, 16-22 vi, 3 ♀♀ (including the holotype), 2 ♂♂; valley Ailjak, 26-6-1930, 1 ♀, 2 ♂♂ (Ummov); Abdan, 26-8-1930, 2 ♂♂ (Maximov).

This new species is near to *Tropidauchen cultricolle* Saussure (1881), described by that author from Ashkhabad (Turkmenistan), but differs from it by the following characters:

<i>Tropidauchen uvarovi</i> sp. n.	<i>Tropidauchen cultricolle</i> Saussure.
♀, ♂. Vertex very broad, octagonal.	♀, ♂. Vertex broad, oval.
Antennae 14-15-jointed.	Antennae 17-jointed.
Pronotum slightly covering the head, not reaching the vertex.	Pronotum strongly covering the head, reaching to the vertex.
Hind tibiae red inside.	Hind tibiae blue inside.

This species the author dedicates with profound respect to Dr. B. P. Uvarov, one of the best specialists in *Orthoptera*.

*57. ***Tropidauchen miramæ*** sp. n. (Figs. 1 M and 2 M).

♀ (Holotype). Body somewhat rough.

Head in the posterior part slightly rugulose, sparsely punctured, nearly smooth. Eyes shortly-oval, slightly prominent sideways; vertical diameter of the eye a little larger than the horizontal diameter and equals to two-thirds of the interocular space. Face vertical. Frontal ridge narrow, strongly depressed, nearly parallel-sided, triangularly-divergent at the clypeus and somewhat obliterated; seen in profile wavy, strongly prominent at the antennal bases; its margins thick. Vertex narrow, long, oval, strongly depressed, granular; median keel in the posterior part of the vertex distinct. Antennae thick, 18-jointed, not reaching the posterior margin of the pronotum.

Pronotum slightly rugulose, but sharply granular at the middle; on each side of the median keel with two oblique sharply-granular folds; seen in profile feebly arched, somewhat wavy; posterior angle obtuse, at the middle

excised. Lateral lobes of the pronotum slightly rugulose, but sharply granular, with three indistinct transverse sulci, at the middle with a longitudinal smooth fold; anterior margin wavy, vertical, anterior lower angle obtuse, feebly rounded; posterior margin wavy, oblique, posterior lower angle obtuse, rounded; lower margin obliquely ascending, wavy.

Mesonotum and metanotum slightly rugulose and sharply granular, with a median keel.

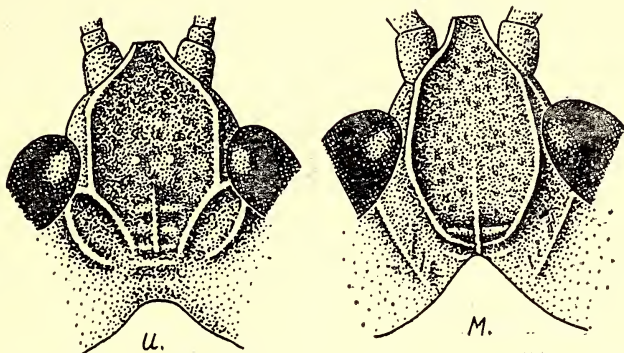


Fig. 2.—U. *Tropidauchen uvarovi*, sp. n., allotype, ♂, vertex.—M. *T. miramae*, sp. n., allotype, ♂.

Sternum sparsely and finely punctured; its length nearly 1.5 times as long as maximum width; interspace between lobes of the mesosternum scarcely wider than long. Processus of the prosternum narrow, wedge-shaped; its apex feebly excised.

Hind femur smooth, its length 3.3 times as long as maximum width; upper margin with 9 small teeth; lower margin smooth, wavy. Hind tibia a little shorter than hind femur, with 9 spines on both sides.

Abdomen with a sharp median keel, seen in profile forming small triangularly-blunted teeth at the posterior margin of each segment. Valvae of the ovipositor with blunted points. Lower valvae of the ovipositor with a sharp projection on the outer margin. Posterior margin of the subgenital plate feebly triangularly-prominent.

General coloration brownish-olive. Head whitish. Apical part of the antennae brown. Margins of the pronotum and of its lateral lobes and longitudinal fold of the lobes, whitish. Abdomen below yellowish-white. Hind femur inside yellow; its lower margin and upper margin inside black-blue; middle of apex outside and inside, black. Hind tibiae yellow (in some paratypes violet-rosy); spines yellow with black apex.

♂ (allotype). Like the female, but considerably smaller. Antennae reaching the posterior margin of the pronotum.

Coloration like the female.

	holotype ♀	allotype ♂	paratypes ♀♀	paratypes ♂♂
Length of the body ...	50.5mm	35.6mm	55.5-71.5mm	28.5-36.0mm
" of the pronotum ...	15.8 "	10.5 "	16.5-17.2 "	9.2-11.0 "
" of the hind femora .	21.7 "	16.5 "	22.5-24.0 "	15.5-16.8 "
" of the hind tibiae ...	20.7 "	15.5 "	21.5-23.0 "	14.5-15.8 "

Patria. North Afghanistan: pass Irghailyk, 14. vi. 1 ♀, 2 ♂♂; settl. Morbek. 16-25. vi, 4 ♀♀ (including the holotype), 2 ♂♂; Mazar-i-Sherif 24. vi, 1 ♂; valley Ailjak, 26-6-1930, 2 ♂♂ (Umnov); pass Ab-dugh, 28-8-1930, 1 ♀ (Maximov).

This new species is near to *Tropidauchen paramonovi* Dirsh (1927), described by that author from Firuza (Kopet-Dagh, Turkmenistan), but differs from it by the following characters:

<p>Tropidauchen miramae sp. n. ♀, ♂. Body more slender. Vertex more narrowed. Pronotum sharply granular. Processus of the prosternum narrow. Hind femur slender; its length 3.3 times its maximum width.</p>	<p>Tropidauchen paramonovi Dirsh. ♀, ♂. Body more robust. Vertex more broadened. Pronotum feebly granular. Processus of the prosternum broad. Hind femur robust; its length 2.9 times its maximum width.</p>
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This species the author dedicates to Dr. Emilia F. Miram, curator of Orthoptera in the Zoological Institute of the Academy of Sciences, Leningrad, in acknowledgment of her assistance in the work.

53. Chrotogonus homalodemus (Blanchard), 1836.

This species has been recorded by Kirby (1889) with a question mark from between Khusan and Quetta.

59. Pyrgomorpha conica (Olivier), 1791.

Gurimar, 9-7-1930, 1 ♂, 1 ♀ (Umnov); Mouth of the river Kunduz-Daria, 29-7-1931, 1 ♂, 2 ♀♀ (Maximov).

Kirby (1889) has recorded apparently this species from Badghis, as *Pyrgomorpha bispinosa* Walscer.

***60. Derycoris albidula** (Serville), 1839.

Man-Guzar, 16-8-1930, 2 ♂♂, 2 ♀♀ (Maximov).

***61. Oxya fuscovittata** (Marschall), 1835.

Mouth of the river Kunduz-Daria, 29-7-1931, 8 ♂♂, 20 ♀♀, 17 larvae (Maximov).

***62. Diexis gussakovskyi** Miram (in litt.).

Kazan, 11-7-1930, 1 ♀ (Maximov).

63. Conophyma predtetshenskyi sp. n. (Figs. 3A, B, C, D and E).

♂ (holotype). Body of medium size, robust and smooth.

Head not elevated above the level of the pronotum, very sparsely and finely punctured. Eyes nearly round, small, slightly prominent sideways; vertical diameter of the eye equal to interocular space. Face sloping. Frontal ridge scarcely depressed, smooth, nearly parallel-sided, not reaching the clypeus; seen in profile feebly prominent at the antennal bases; its margins scarcely distinct. Fastigium of the vertex strongly sloping, almost vertical, vertex scarcely depressed, very finely and densely punctured; its margins scarcely distinct; median keel very weak; maximum width of the vertex about two times that of frontal ridge between antennae. Temporal foveolae indistinct. Occiput slightly sloping, finely and densely punctured. Antennae thin, 19-20-jointed, considerably longer than head and pronotum together.

Pronotum in prozona nearly smooth, with three transverse sulci; two anterior sulci shallow, not intersecting the median keel; median keel sharp and intersected only by the third, deep transverse sulcus; lateral keels interrupted and form double set of keels on each side; first keels reach only the first transverse sulcus, convergent; second keels begin on the lateral lobes near the first transverse sulcus and gradually ascending reach the second transverse sulcus, within this area second keels are parallel to the first keels, while further passing along the margin of the pronotum they become parallel to the median keel, reaching to the third transverse sulcus; metazona very short, densely punctured, with hardly marked median keels, its length about one-third that of the prozona; posterior margin straight, very feebly triangularly-excised at the middle. Lateral lobes of the pronotum trapezoidal, somewhat narrowed towards the lower margin, with three transverse sulci, feebly punctured, anterior and posterior margins undulating; lower margin strongly wavy, obliquely-ascending; anterior lower angle obtuse, rounded; posterior lower angle 90°, broadly-rounded.

Mesonotum and metanotum smooth; metanotum with a distinct median and lateral keels.

Sternum sparsely and coarsely punctured, its maximum width almost equal to length; interspace between lobes of the mesosternum about 1.5 times as wide as long.

Front and middle femora somewhat swollen. Hind femur thick; its length 3.3 times its maximum width. Hind tibia a little shorter than hind femur, with 9 spines on the outer and 8-9 spines on the inner side.

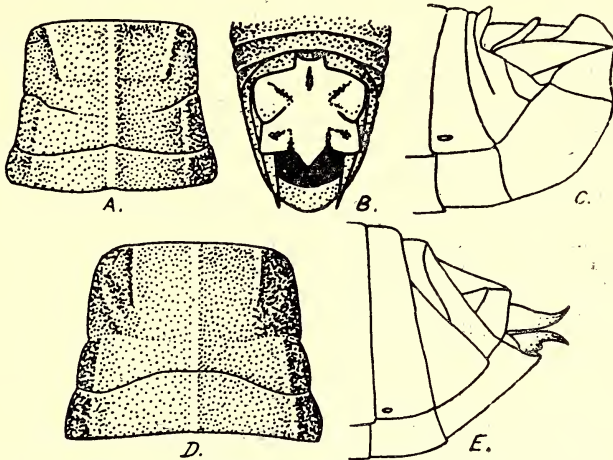


Fig. 3.—*Conophyma predtelshenskyi* Sp. n.

- A. Dorsal view of the pronotum of type ♂; B. Dorsal view of the anal plate of type ♂; C. Lateral view of the apex of abdomen of type ♂; D. Dorsal view of the pronotum of allotype ♀; E. Lateral view of the apex of abdomen of allotype ♀; ×7.5.

Abdomen, seen from above, with a median keel; lobes of the last abdominal tergite broad and short, widely separated. Anal plate nearly square, apical part slightly narrowed, posterior angles rounded, posterior margin with a large triangular projection at the middle; its surface at the median longitudinal sulcus convex and with a very sharp triangular projection at each posterior angle. Cercus straight, strongly conical, pointed at the apex; its length about 1.75 times the length of the anal plate.

Head, pronotum and abdomen, seen from above nearly black. Antennae, front and middle legs, hind femora, sternum, head and abdomen, seen from below—dirty-yellow. Hind tibiae orange.

♀ (allotype). Like the male, somewhat larger. Vertical diameter of the eye somewhat less than the interocular space. Frontal ridge obliterate at the clypeus, more depressed than in the male. Vertex with distinct median keel, more depressed than in the male and with distinct elevated margins. Front and middle femora slightly swollen. Hind tibia with 8-9 spines on the outer and on the inner side. Upper and lower valvae of the ovipositor with acute points and a distinct projection on the outer margin. Subgenital plate considerably longer than wide; its posterior angles broadly-rounded; posterior margin with a rather long narrow triangular sharply pointed projection at the middle.

Coloration like the male. Head, pronotum and abdomen, seen from above, dark brownish with black spots.

	holotype ♂	allotype ♀	paratypes ♂♂	paratypes ♀♀
Length of the body.	14.2 mm	16.5 mm	13.0-14.8 mm	15.5-18.5 mm
" of the pronotum.	2.3 "	2.4 "	2.1-2.6 "	2.8-3.1 "
" of the hind femora.	7.5 "	7.6 "	7.0-8.0 "	8.2-9.0 "
" of the hind tibiae.	6.5 "	6.6 "	6.0-7.0 "	7.2-8.0 "

Patria. North Afghanistan: Dzhanbulak, 13. vi, 3 ♂♂ (including the holotype), 2 ♀♀; pass Irghailyk, 13. vi, 3 ♂♂, 1 ♀; settl. Norbek, 22. vi, 2 ♂♂; Mazar-i-Sherif, 24-6-1930, 1 ♂, 1 ♀ (Umnov); pass Ab-dugh, 20-8-1930, 1 ♂, 3 ♂♂ (Maximov).

This species is near to *Conophyma ikonnikovi* Uvarov (1925), described by that author from Southern Bokhara (at present Tadjikistan), but differs from it by the following characters:

***Conophyma predtetschenskyi* sp. n.**

♂. Lobes of the last abdominal tergite widely separated.

Anal plate nearly square, slightly narrowed to the apex; posterior angles obtuse; its surface at the posterior angles convex, with a sharp triangular projection at each posterior angle.

Cerci straight, conical; their length almost 1.75 the length of the anal plate.

***Conophyma ikonnikovi* Uvarov.**

♂. Lobes of the last abdominal tergite very feebly separated, almost contiguous.

Anal plate not square, strongly dilated to the apex; posterior angles acute; its surface trough-like, without triangular projection at the posterior angles.

Cerci at the bases constricted, in the apical third, from within, swollen, then strongly pointed; their length almost two times the length of the anal plate.

This species the author dedicates to his first teacher Dr. S. A. Predtetschensky.

***64. *Conophyma bey-bienkoi* sp. n.** (Figs. 4A, B, C, D and E).

♂ (holotype). Body of medium size, robust and smooth.

Head not elevated above the level of the pronotum, smooth. Eyes nearly round, slightly prominent sideways; vertical diameter of the eye equal to

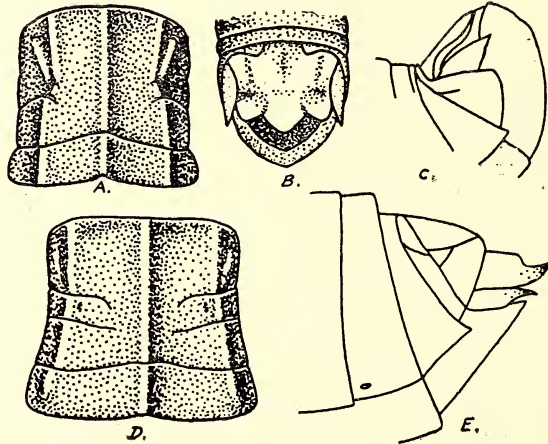


Fig. 4.—*Conophyma bey-bienkoi* sp. n.

- A. Dorsal view of the pronotum of type ♂; B. Dorsal view of the anal plate of type ♂; C. Lateral view of the apex of abdomen of type ♂; D. Dorsal view of the pronotum of allotype ♀; E. Lateral view of the apex of abdomen of allotype ♀; $\times 7.5$.

horizontal diameter and nearly equal to interocular space. Face sloping. Frontal ridge slightly depressed, under the median ocellum subconstricted, then dilated and nearly reaching the clypeus; seen in profile feebly prominent at the antennal bases; its margins thick. Fastigium of the vertex strongly sloping, frontal ridge between antennae. Temporal foveolae indistinct. Occiput feebly elevated; median keel absent; maximum width about two times that of the

frontal ridge between antennae. Temporal foveolae indistinct. Occiput feebly sloping, punctured. Antennae thin, 19-jointed, somewhat longer than head and pronotum together.

Pronotum smooth in the prozona; lateral keels distinct, feebly concave; metazona punctured, its length one-third that of the prozona; median keel in the prozona sharp, intersecting first transverse sulcus, in the metazona indistinct; posterior margin straight very feebly excised in the middle. Lateral lobes of the pronotum trapezoidal, narrowed towards the lower margin, in the posterior part punctured, with three transverse sulci; interspaces between first and second, as well as second and third transverse sulci at the lateral keels of the pronotum slightly rough; anterior and posterior margins undulating; lower margin strongly wavy, obliquely-ascending; anterior lower angle obtuse, rounded; posterior lower angle a little larger than 90°, broadly-rounded.

Mesonotum and metanotum smooth; metanotum with a distinct median and lateral keels.

Sternum very sparsely punctured; its maximum width equal to its length; interspace between lobes of the mesosternum 1.25 times as wide as long.

Front and middle femora swollen. Hind femur thick; its length 3.3 times the maximum width. Hind tibia a little shorter than hind femur, with 9 spines on both sides.

Abdomen, seen from above, with a median keel; lobes of the last abdominal tergite short, broad, widely separated. Anal plate nearly square; lateral margins somewhat excised; posterior angles very sharp, rounded; posterior margin somewhat excised, with a slight triangular projection at the middle; its surface at the middle convex. Cerci conical, pointed at the apex, straight, a little longer than the anal plate.

Head, pronotum and abdomen, seen from above, brownish-blackish with brown spots. Antennae, front and middle legs, hind femora, sternum, head and abdomen, seen from below, tawny. Apical part of the hind tibiae and basal part of the hind femora from within orange-reddish.

♀ (allotype). Like the male, but larger. Subgenital plate considerably longer than wide, posterior angles broadly-rounded, posterior margin with a rather long triangular projection at the middle. Upper and lower valvae of the ovipositor with acute points and projection on the outer margin. Coloration like the male.

	holotype ♂	allotype ♀	paratypes ♂♂	paratypes ♀♀
Length of the body ...	13.0mm.	15.5mm	12.8-14.0mm	16.5-19.8mm
„ of the pronotum ...	2.3 „	2.9 „	2.1-2.4 „	3.6- 3.9 „
„ of the hind femora .	7.5 „	8.2 „	6.5-7.8 „	8.5- 9.0 „
„ of the hind tibiae ...	6.5 „	7.2 „	5.5-6.8 „	7.5- 8.0 „

Patria. North Afghanistan: pass Irghailyk, 13. vi, 4 ♂♂, 5 ♀♀; Mabar-i-Sherif, 24. vi, 1 ♂; valley Ailjak, 26-6-1930, 2 ♂♂ (including the holotype), 4 ♀♀ (Umnov); pass Ab-dugh, 20-8-1930, 2 ♂♂ (Maximov).

This species is near to *Conophyma sokolowi* Zubovsky (1898), described by that author from environs Tashkent (Uzbekistan), but differs from it by the following characters:

Conophyma bey-bienkoi sp. n.

♂. Median keel of the pronotum slight.

Anal plate nearly square; lateral margins excised; posterior angles very sharp, rounded, prominent sideways; posterior margin excised.

Conophyma sokolowi Zubovsky.

♂. Median keel of the pronotum sharp.

Anal plate square; lateral margins straight; posterior angles feebly expressed, broadly rounded, not prominent sideways; posterior margin convex.

This species the author dedicates to Dr. G. J. Bey-Bienko, the author of numerous valuable and very interesting papers on *Orthoptera*, *Dermaptera* and *Blattodea*.

*65. *Conophyma kittaryi* Tarbinsky, 1931 (Figs. 5A and B).
 Dzhanbulak, 13. vi, 2 ♂♂; valley Ailjak, 14. vi, 2 ♀♀; settl. Norbels,
 22. vi., 5 ♂♂, 1 ♀; Kara-bel, 28-6-1930, 1 ♂ (Umnov); Gurimar, 19-8-1930,
 2 ♂♂, 3 ♀♀ (Maximov).

♀ (nova). Body large, robust, smooth.

Head somewhat elevated above the level of the pronotum, smooth. Eyes nearly round, slightly prominent sideways; vertical diameter equal to horizontal diameter of the eye and nearly equal to interocular space. Face moderately sloping; Frontal ridge slightly depressed at the median ocellum, almost parallel-sided, obliterate at the clypeus; seen in profile flat, not prominent at the antennal bases; its margins thick. Fastigium of the vertex forming an angle of about 45° ; vertex broad, not depressed at all, slightly convex; margins scarcely visible; median keel absent; maximum width about 2.25 times that of the frontal ridge between antennae. Temporal foveolae indistinct. Occiput slightly sloping. Antennae thin, not reaching the posterior margin of the pronotum, 20-22 jointed.

Pronotum smooth, feebly convex, punctured, with three weak transverse sulci, only the last sulcus intersecting median keel; median keel distinct; lateral keels slight, but distinct, interrupted and forming double set of keels on each side; first keels somewhat converging and reach only the first transverse sulcus; second keels begin near the first transverse sulcus and are divergent; metazona very short, punctured, its length about one-third that of the prozona; posterior margin straight, indistinctly excised in the middle. Lateral lobes of the pronotum punctured, feebly trapezoidal, somewhat narrowed at the lower margin, with three deep transverse sulci, interspaces between them rough; anterior margin feebly wavy, anterior lower angle obtuse, feebly rounded posterior margin almost straight, posterior lower angle obtuse, broadly-rounded; lower margin slightly obliquely-ascending, at the middle convex.

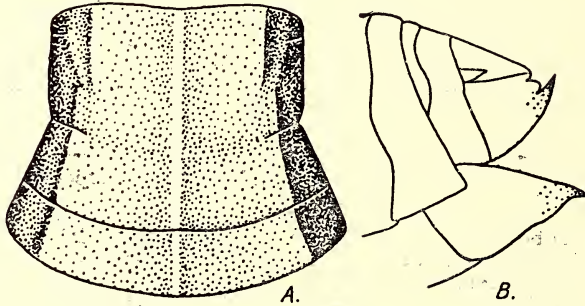


Fig. 5.—*Conophyma kittaryi* Tarbinsky; ♀.

A. Dorsal view of the pronotum.

B. Lateral view of the apex of abdomen; $\times 7.5$.

Mesonotum and metanotum smooth, with a distinct median keel.

Sternum sparsely and finely punctured, its maximum width nearly equal to length; width of interspace between lobes of the mesosternum a little larger than its length.

Front and middle femora feebly swollen. Hind femur short; its length 3.3 times its maximum width. Hind tibia a little shorter than hind femur, with 8-9 spines on the outer and 9-10 spines on the inner side.

Abdomen, seen from above, with a distinct median keel. Subgenital plate nearly square. Valvae of the ovipositor with acute points; lower valvae with a small projection on the outer margin.

General coloration blackish-brown, with two dirty-yellow longitudinal stripes, angularly-inflexed on the pronotum and almost parallel-sided on the abdomen. Lateral lobes of the pronotum in the upper middle black, in the lower middle dirty-yellow. Antennae, head and legs—yellow-brownish. Sternum and abdomen,

seen from below—dirty-yellow. Hind femur from within and below yellow, its upper margin with two darkish fasciae. Hind tibiae orange.

	♀ ♀	♂ ♂
Length of the body ...	21.5-23.5 mm	17.5-19.5 mm
" pronotum ...	4.1- 4.5 "	3.3- 4.0 "
" hind femora ...	10.0-10.2 "	8.5-10.0 "
" hind tibiae ...	8.5- 8.7 "	7.0- 8.5 "

***66. Calliptamus italicus italicus** (Linnaeus), 1758.

Mouth of the river Kunduz-Daria, 29-7-1931, 11 ♂♂, 5 ♀♀ (Maximov).

***67. Calliptamus siculus deserticola** (Vosseler), 1902.

Gurimar, 19-8-1930, 2 ♂♂, 7 ♀♀; Ak-Tepe, 27-7-1931, 8 ♂♂; 5 ♀♀ (Maximov).

***68. Kripa colesyriensis** (Giglio-Tos), 1893.

Ak-Tepe, 27-7-1931, 3 ♂♂, 1 ♀ (Maximov).

69. Anacridium aegyptium (Linnaeus), 1764.

Recorded by Kirby (1889) from Badghis and Hari-Rud valley, under the name *Acridium aegyptium* (Linnaeus).

***70. Thisoecetrinus pterostichus** (Fischer de Waldheim), 1846.

Mouth of the river Kunduz-Daria, 29-7-1931, 2 ♂♂, 1 ♀ (Maximov).

71. Thisoecetrus littoralis asiaticus Uvarov, 1933.

Kazan, 11-8-1930, 1 ♂ (Maximov).

Recorded by Kirby (1889) from Afghanistan (between Khusan and Quetta), under the name *Euprepocnemis littoralis* (Rambur).

***72. Thisoecetrus adpersus** Redtenbacher, 1889.

Man-Guzar, 16-8-1930, 1 ♂, 4 ♀♀ (Maximov).

73. Kabulia afghana Ramme, 1928.

This species has been described by Ramme (1928) from Kabul.

***74. Gomphomastax morosus** sp. n. (Figs. 6A, B, C and D).

♀ (holotype). Body slender, rugulose.

Head rather large, elevated above the level of the pronotum, strongly rugulose. Eyes irregularly-oval, moderately prominent sideways; the largest diameter of the eye a little less than the interocular space and 1.5 times the smallest diameter. Face very strongly sloping. Frontal ridge narrow, strongly depressed, almost parallel-sided, at vertex feebly triangularly dilated and reaching to the clypeus; seen in profile wavy, slightly prominent at the antennal bases; margins thin. Vertex convex, strongly rugulose, forming an acute angle with frontal ridge, margins scarcely visible; median keel distinct. Occiput feebly sloping, rugulose, with distinct median keel. Antennae thick and short, 12-jointed, a little longer than the length of the front femora, not reaching the posterior margin of the pronotum.

Pronotum rugulose; median keel slight, but distinct; posterior margin straight, at the median keel feebly triangularly-excised; lateral keels indistinct. Lateral lobes of the pronotum oblong, their length being larger than the height, rugulose; about the middle with a sharp transverse sulcus and distinct keel passed diagonally from the posterior upper angle to the anterior lower angle; anterior margin straight, anterior lower angle somewhat more than 90°, broadly-rounded; posterior margin slightly wavy, posterior lower angle nearly 90°, feebly rounded; lower margin slightly wavy and a little obliquely-ascending.

Mesonotum and metanotum slightly rugulose, with distinct median and lateral keels.

Sternum very finely and densely punctured, nearly square, with rounded angles and a border at the margins; anterior margin prominent; posterior margin triangularly-excised; interspace between lobes of the mesosternum about 3.5 times as long as its length,

Arolia between claws of the tarsi small, reaching to the middle of claws.

Abdomen, seen from above, with an indistinct median keel. Valvae of the ovipositor with acute points; outer margin of the upper valvae with some irregular teeth; outer margin of the lower valvae with 4 large teeth. Posterior margin of the subgenital plate with 3 projections; the middle projection is longer, sharply-angular; two lateral projections obtusely rounded.

General coloration yellowish-brown with blackish design. Apical part of the antennae blackish.

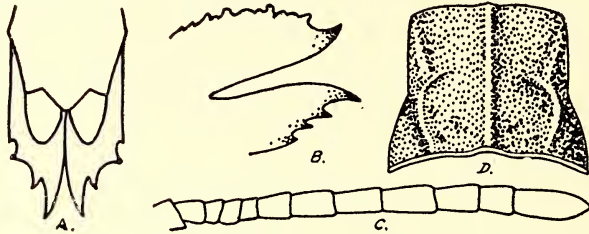


Fig. 6.—*Gomphomastax morosus* sp. n. type ♀.

- A. Dorsal view of the subgenital plate; B. Lateral view of the ovipositor.
C. Dorsal view of the antenna; D. Dorsal view of the pronotum of allotype ♂; $\times 12.5$.

♂ (allotype). Like the female, smaller. The largest diameter of the eye a little longer than the interocular space. Antennae thin, considerably longer than head and pronotum together, somewhat thickened at the apex. Hind femur very slender; their length nearly 6 times larger than the maximum width. Hind tibia considerably longer than hind femur, with 22 spines on the outer and 17 spines on the inner side. First joint of the hind tarsus with 4 spines on the outer and 5 spines on the inner margin. Subgenital plate, seen in profile, shortly triangular. Cerci rather long, straight, cylindrical, obtuse, with sparse hairs.

Coloration like the female.

	holotype ♀	allotype ♂
Length of the body	20.5 mm.	13.5 mm.
„ of the antennae	4.5 „	„
„ of the pronotum	1.8 „	1.1 „
„ of the hind femora	„	7.8 „
„ of the hind tibiae	„	9.0 „

Patria. North Afghanistan: pass *Irghailyk*, 14-6-1930, 1 ♀ (holotype), 1 ♂ (Umnov).

This new species is near to *Gomphomastax opacus* Krauss in Zubovsky (1898a), described by that author from Podgorny and Sasanovka (Kirghizstan), but differs from it by the following characters:

***Gomphomastax morosus* sp. n.**

♀. Antennae thick, 12-jointed.

Upper valvae of the ovipositor at apex of the outer margin with distinct large excision.

***Gomphomastax opacus* Krauss.**

♀. Antennae thin, 23-25 jointed.

Upper valvae of the ovipositor at apex of the outer margin without excision.

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